

WHAT IS CLAIMED IS:

1. A toy cotton candy machine comprising:

- a) a base with a drive motor and an upwardly extending fixed shaft, a primary power switch, a power cord and a power plug;
- b) a bowl engaging the base by securement means including a detent;
- c) a spinner enclosed within a stationary, insulating top cap, the top cap held in place on the shaft by a lock nut;
- d) a time-based logic controller adapted to control a plurality of machine functions; and
- e) a heater adapted to supply heat to the spinner,

the machine further comprising at least one structural safety feature and at least one operational safety feature.

2. A device of Claim 1 in which the at least one structural safety feature is a member selected from the group consisting of:

- a) a first sensor adapted to detect proper installation of the top cap;
- b) a second sensor adapted to detect proper installation of the bowl;
- c) the lock nut having a removal-resistant first shape;
- d) a removal tool with an aperture conformal with the first shape and affixed to the power cord immediately adjacent to the power plug; and
- e) a third sensor adapted to detect proper installation of the spinner, and

in which the at least one operational safety feature is a member selected from the group consisting of:

- i) a first thermostat situated within the base and adapted to serve as a primary power interrupt if the base reaches an overheat temperature;
- ii) a third sensor adapted to detect rotation of the spinner, produce a rotation signal and transmit the rotation signal to the logic controller;
- iii) a first function programmed within the logic controller to actuate a power interrupt and actuate an audible alarm at a first preselected time interval after the power switch is actuated;
- iv) a second function programmed within the logic controller to maintain rotation of the spinner for a second preselected time interval after power to the heater is interrupted;
- v) a third function programmed within the logic controller adapted to actuate the audible alarm when at least one of the sensors has indicated a machine fault; and
- vi) a fuse adapted to serve as a primary power interrupt in the event of a catastrophic electrical fault within the machine.

3. A device of Claim 2 comprising a plurality of the structural safety features.

4. A device of Claim 3 comprising all of the structural safety features.

5. A device of Claim 2 comprising a plurality of the operational safety features.

6. A device of Claim 5 comprising all of the operational safety features.

7. A device of Claim 2 comprising a plurality of the structural safety features and a plurality of the operational safety features.

8. A device of Claim 2 comprising all of the structural safety features and all of the operational safety features.

9. A device of Claim 2 in which the third sensor comprises a light source and a light detector.

10. A device of Claim 9 in which the light source emits infrared light and the light detector detects infrared light.

11. An electrically activated device comprising:

- a) an operational unit;
 - b) a protective cover adapted to prevent a user from contacting the operational unit;
 - c) a power cord and a power plug adapted to energize the operational unit;
 - d) a lock nut with a removal-resistant shape adapted to hold the protective cover in place; and
 - e) a removal tool with an aperture conformal with the removal-resistant shape,
- wherein the removal tool is affixed to the power cord immediately adjacent to the power plug, whereby the power plug must be unplugged in order to permit the removal tool to remove the lock nut.